identifying ones of the reencoded and modulated error corrected decoded bits as the first and second known block of the sequence of symbols containing known symbol values.

10. The method of Claim 3 wherein the estimated interferer characteristics include at least one characteristic selected from the group consisting of desired signal carrier power, noise power, interference, signal power or a ratio calculated based on ones of desired signal carrier power, noise power, interference and signal power.

11. The method of Claim 3 wherein a plurality of interferer signal characteristic discontinuities are detected in the unknown block and wherein demodulating the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on another portion of the unknown block further comprises selecting a desired demodulation type to use between each of the detected interferer signal characteristic discontinuities based on the detected interferer signal characteristic discontinuities.

12. The method of Claim 3 wherein identifying a known block of the sequence of symbols containing known symbol values further comprises:

first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions; and

identifying ones of the reencoded and modulated error corrected decoded bits as at least one known block of the sequence of symbols containing known symbol values.

13. A method of processing a received signal comprising:

receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the

5   plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

partitioning the sequence of symbols into a plurality of subfields, ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality

10   of known symbol values;

determining the desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of the subfields; and

demodulating the subfields using the respective determined desired

15   demodulation types.

14.   The method of Claim 13 wherein determining the desired demodulation type for use in demodulating the subfields further comprises selecting either non-interferer cancellation or interferer cancellation demodulation as the

20   desired demodulation type for use in demodulating the subfields.

15.   The method of Claim 14 wherein determining a desired demodulation type for use in demodulating the subfields further comprises estimating interferer signal characteristics for the ones of the subfields and selecting either non-interferer

25   cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics.

16.   The method of Claim 15 further comprising detecting an interferer signal characteristic discontinuity location in the sequence of symbols.

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17.   The method of Claim 16 wherein partitioning the sequence of symbols into a plurality of subfields further comprises partitioning the sequence of symbols into a plurality of subfields based on the detected interferer signal characteristic

discontinuity location to position the detected interferer signal characteristic discontinuity location at a transition between ones of the subfields.

18. The method of Claim 16 wherein the interferer signal characteristic

5   discontinuity location is in an identified one of the subfields and wherein determining the desired demodulation type for use in demodulating the subfields further comprises determining a first desired demodulation type for a first portion of the identified one of the subfields and a second desired demodulation type for a second portion of the identified one of the subfields, the first portion and the second portion being

10   demarcated by the interferer signal characteristic discontinuity location.

19. A system for processing a received signal comprising:

a receiver that receives the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

15   an identification circuit that identifies a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

a determination circuit that determines a desired demodulation type for use in demodulating the unknown block based on the known symbol values;

20   a detector circuit that detects an interferer signal characteristic discontinuity location in the unknown block; and

a demodulator that demodulates the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on another portion of the

25   unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity.

30   20. The system of Claim 19 wherein the desired demodulation type is selected from the group consisting of non-interferer cancellation and interferer cancellation.